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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/762,291

01/23/2004

James D. Vidrine

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EXAMINER

VIDAYATHIL, TRESA V

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

06/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/762,291

Applicant(s)

VIDRINE, JAMES D.

Examiner

Tresa V. Vidayathil

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2007 and 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Amended claim 14 is objected to because of the following informalities: In line 7, the word "stopper" should be replaced by the word "plug". Claim 7, line 7 indicates that this is the correct wording. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The amended specification does not enable how all the air is discharged from the chamber and how the second leg of the pump cycle functions. First, it is still not clear how all the air is dispelled through outlet 26, as indicated by the specification (p. 6, l. 2) when there is a continuous supply of air entering the chamber through the air outlet nipple (p. 6, l. 1). Second, it is still unclear when and why the plunger unseats from the liquid inlet when there is pressurized air continuously entering the chamber (p. 6, ll. 1-4).

It seems that there is some step or information necessary to the operation of this invention that is missing from the specification. For example, at some point in the pumping cycle an air compressor or control valve may cut off the air entering the chamber.

For the above reasons, claims 1-17 are not enabled by the specification. Please see section 7 below for additional information.

***Response to Amendment***

4. The reply filed on March 1, 2007 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s):

- a. The comma inserted into claim 1 was inserted into the wrong place. A comma should be placed after the text "a compressed air line" (Amended Claims, p. 5, amended claim 1). All other claims were amended appropriately, and therefore, the Examiner withdraws all other prior objections to the claims.

See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).**

5. Amendments to the drawings and specification have been received, and due to these amendments, the prior objections to the drawings and specification are withdrawn by the Examiner

6. The Applicant changed Claims 3 and 12 so that the term "valve seat" has been replaced with "gasket." The 35 U.S.C. 112, first paragraph rejection with respect to this issue is withdrawn by the Examiner.

### ***Response to Arguments***

7. Applicant's arguments filed March 1, 2007 regarding the 35 U.S.C. 112, first paragraph rejection have been fully considered, but they are not persuasive.

The remarks provided by the Applicant in conjunction with the specification has made the operation of the first leg of the pump cycle more clear. The Examiner now understands that the 90 psi air line does not provide enough force to break the seal between the plug and the nipple. The buoyancy force provided by the liquid in conjunction with the 90 psi air line breaks the seal, and at this point, the 90 psi air line provides enough force to propel the plunger toward the liquid inlet to seal the inlet. As the air fills the sealed chamber and the pressure in the chamber increases, all the liquid is dispelled through outlet 26.

However, the remarks provided by the Applicant in conjunction with the specification does not yet enable how all the air is discharged from the chamber and how the second leg of the pump cycle functions. First, it is still not clear how all the air

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is dispelled through outlet 26, as indicated by the specification (Page 6, Line 2) when there is a continuous supply of air entering the chamber through the air outlet nipple. This portion of the specification was never amended. In fact, the remarks provided by the applicant are in direct contradiction to this statement in the specification. The remarks indicate that not all the air is dispelled from the chamber because the plunger drops at a pressure of approximately 10 psi (March 1, 2007 Amendment, Page 11, last line to Page 12, lines 1-2). Second, it is unclear how the pressure in the sealed chamber can drop to 10psi. Once the liquid is dispelled through outlet 26, air begins to exit the chamber through outlet 26. At this point, as indicated by the remarks provided by the applicant, there is a pressure drop in the chamber. It is unclear how the pressure can drop to 10 psi when there is a constant 90 psi air source entering the chamber. In addition, if the 90 psi air source alone was adequate to initially propel the plunger toward the liquid inlet and maintain the seal with the inlet, at what point does the 90 psi air source become inadequate and why. It seems that there is some step or information necessary to the operation of this invention that is missing from the specification. For example, at some point in the pumping cycle an air compressor or control valve may cut off the air entering the chamber.

For the above reasons, claims 1-17 are not enabled by the specification. This portion of the 35 U.S.C. 112, first paragraph rejection asserted in the previous office action stands as noted above section 3.

***Allowable Subject Matter***

8. Claims 1-17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action.

9. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach in combination with the other limitations of the first independent claim 1) an outlet nipple extending through the open lower end of the tube, 2) a head gasket seat and a beveled head plate gasket disposed on the open upper end of the tube, 3) a gasket on the plunger and the gasket engages the head gasket seat and the beveled head plate gasket to close the open upper end, and 4) a plunger with a sealable opening positioned in one of double walls and the opening communicating with the annular chamber.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Hoppmann 4,844,699 teaches the various features of the casing, tube, and discharge line. Hoppmann also teaches a plunger disposed in and freely movable within the tube and a pair of lifting handles.

b. Masters 5,148,827 teaches a tube that extends above the top wall of the casing.

- c. Thurot 6,602,055 teaches an air line having a portion disposed on a bottom wall.
- d. Anderson 2002/0172600 teaches an outlet having a conical opening.
- e. Ronning 2,199,673 teaches a plug in a plunger for engaging a nipple and sealing an outlet. Ronning also teaches a plunger with the various features claimed in amended claims 7 and 14.
- f. Meyer 3,299,818 teaches a filter positioned at an open upper end of a tube.
- g. Komiya 6,092,547 teaches a plug fabricated from a pliable material.
- h. Kelada 6,099,735 teaches a plunger fabricated from iron.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.



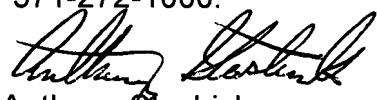
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tresa V. Vidayathil whose telephone number is (571) 272-3436. The examiner can normally be reached on 9AM - 5:30PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571) 272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
TVV

  
Anthony Stashick  
Supervisory Primary Examiner  
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